

ENERGY TIDBITS – February 2009

Governor Granholm in her State of the State address announced a very aggressive goal to reduce our reliance on fossil fuels for generating electricity by 45% by 2020. Her plan to achieve the 45-by-20 goal includes:

- Ask the legislature to make Michigan the first state in the nation to let every homeowner and business become a renewable energy entrepreneur by installing solar panels or wind systems and selling that power to the power company.
- Have the Public Service Commission put our utility companies in the energy efficiency business by changing how rates are set.
- Create the Michigan Energy Corps to put thousands of unemployed Michigan citizens back to work weatherizing homes, schools, and other public buildings, installing renewable energy technology, and turning our abundant natural resources into renewable fuels.
- Launch Michigan Saves in conjunction with utility companies. Michigan Saves will allow Michigan families and businesses to weatherize their homes and install energy efficiency measures with zero up-front charges. The monthly savings will pay the costs of the improvements.

The Governor also indicated that these ambitious goals will lessen the need for new coal power plants. The Governor has directed the Dept. of Environmental Quality to evaluate, in consultation with the MPSC, both the need for additional electricity generation and all feasible and prudent alternatives before approving new coal-fired power plants.

Governor Granholm also indicated that state government needs to do its part to achieve this ambitious goal. State government has cut its own electricity use by 23% and saved over \$60 million during the past three years.

Michigan Wind Energy Conference will be held in Detroit at Cobo Hall on March 3 & 4. The conference will meet the needs of a diverse audience including wind energy developers, manufacturers and potential suppliers to the wind industry, local government officials and planners, utility staff, building owners and managers considering a wind turbine for their own facility, contractors, attorneys, consultants, colleges and universities, and state and federal agencies. The conference will have six workshop tracks: commercial wind, community wind, small wind, off-shore wind, manufacturing, and legal, finance, & training. www.glnet.org

Energy Systems Bureau in the Dept. of Energy, Labor, and Economic Growth has consolidated staff from the Energy Office and the Dept. of Environmental Quality. Amy Butler is the new director of the bureau. The 18 staff persons will be working on a variety of renewable energy and energy efficiency initiatives.

Consumers Energy Company is requesting proposals for up to 17.4 MW and 130,000 MWh of renewable capacity, energy and renewable energy credits from small scale renewable energy systems (less than 5 MW of nameplate capacity), located within the Consumers Energy service area. This request is intended to fulfill a portion of the Company's renewable energy requirements specified in Public Act 295. All interested respondents are requested to submit a Notice of Intent no later than Feb. 5. Proposals are

to be submitted no later than March 2. Consumers Energy intends to issue a second request for proposals in March for approximately 600,000 MWh per year of energy, capacity (250 MW) and RECs from additional smaller and larger scale systems.

<http://www.consumersenergy.com/estavlpwr.nsf/RFPs?OpenView>

Michigan Agri-Energy Conference will be held at the Kalamazoo Radisson on March 30-31. Join other farmers, service providers, rural and agricultural leaders, researchers, and state policy makers to learn more about the latest trends in renewable energy.

www.agri-energy.info

VIVACE, a device to produce electricity in slow-moving water, will debut next year in the Detroit River, powering the light for a new wharf near the Renaissance Center. VIVACE is an acronym for Vortex-Induced Vibrations for Aquatic Clean Energy. Mike Bernitsas, the inventor and director of the Marine Renewable Energy Lab at UM, came up with the idea 4 years ago and is developing it with a team of more than 30 students and researchers. In a stream, small eddies, or vortices, are created above and below an object the current hits. These vortices alternate, creating an up and down lift. What Bernitsas envisions is groups of cylinders in frames perpendicular to currents. As the water flow hits the cylinders, it creates vortices that cause the cylinders to move up and down. That energy drives generators to make electricity. In the Detroit River, he plans 21 cylinders, each about 10 inches in diameter and 16 feet long, suspended in frames mid river, which will create 3 kW of energy to power lights on the dock.

<http://www.vortexhydroenergy.com/>

Wind & Solar Power in Michigan has been updated at www.michigan.gov/eorenew. During 2008, 74 MW of wind power were added bringing the cumulative total to 130 MW. During last year, 106 kW of solar power were added bringing the Michigan total to 734 kW.

Strategic Energy Plan for the State will be funded by up to \$1 million from the MPSC Low-Income and Energy Efficiency Fund. Proposals were due Feb. 2 to develop a strategic plan for the State that outlines how promotion and development of energy efficiency and renewable based distributed generation can spur economic development. A draft strategic plan will be available by August 31, 2009.

5th Annual Seminars on Sustainability: SOS for the Environment conference will be held at Lawrence Tech on March 10. The conference offers concurrent seminars in Sustainable Building Design, Codes & Standards for Sustainability, and Maintenance for Sustainable Buildings www.detroitashrae.org

Brownfield Redevelopment with renewable energy offers great potential according to a new study by the MSU Land Policy Institute. The study estimates the renewable energy potential of brownfield sites in Michigan is 5,855 MW, equivalent to powering 1.8 million homes, or almost 50% of Michigan homes. Estimated economic impacts include over 17,500 construction, maintenance and operation jobs and more than \$15 billion in new investment dollars. www.landpolicy.msu.edu.

Green Today, Jobs Tomorrow conference will be held on May 11 at the Lansing Center. The conference will focus on workforce and economic development for Michigan's emerging green economy. The conference is aimed at bringing together business, education and training, labor, environmental, community, and policy advocacy partners who are currently working on nurturing a green economy and talent base in Michigan. Van Jones (founder and president of Green For All and the author of The Green Collar Economy), Sen. Stabenow, and Kate Gordon (Co-Director of the Apollo Alliance) will speak. To sign up for email updates about the conference, please visit www.michigan.gov/greenjobsconference.

UM & GM will open a \$5 million advanced battery research lab to accelerate the design and testing of advanced batteries for electric vehicles. A five-year, \$5-million award establishes the GM/UM Advanced Battery Coalition for Drivetrains.

East Michigan Assoc. of Energy Engineers' next meeting is scheduled for February 10 at the UTLC Gallery in the Technology Building, Lawrence Technological University. Jennifer Utter Heston, Fraser Trebilcock Davis & Dunlap, will speak on Michigan's New Energy Policy: An Overview of the 2008 Energy Package. <http://www.emaee.org>.

Michigan State University process to pretreat corn-crop waste before conversion into ethanol will cut the cost of making biofuels from cellulose. The AFEX (ammonia fiber expansion) pretreatment process, developed by Bruce Dale, professor of chemical engineering, uses ammonia to make the breakdown of cellulose in plants 75% more efficient than when conventional enzymes alone are used. www.bioeconomy.msu.edu.

4th Annual Earth Day Expo will be in downtown Rochester on Sat. & Sun., April 18th & 19th. The Expo is moving to main street and will offer many fun, informative, & earth-friendly activities including: 150+ green & wellness exhibits, presentations, food, farmer's market, kids' corner, films, entertainment, prizes, sustainability tours, free yoga and massage, and a community-building Connections Cafe'. Discover healthy, green alternatives in food, healthcare, energy, housing, fitness, transportation, gifts, personal care, home, garden, finances and more. There is no charge. www.earthdayexpo.org

Energy Tidbits is free and is prepared by John Sarver, Michigan Dept. of Energy, Labor, & Economic Growth. To subscribe, contact sarverj@michigan.gov.